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REMARKS

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Claims 1-23 and 25-41 are pending in the present application. Applicants gratefully acknowledge the allowance of claims 21, 22 and 41.

The Examiner has indicated that claims 7, 8, 27, 28 and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, first in Office Action mailed August 8, 2001, and then in Office Action mailed January 11, 2002. Applicants have rewritten claims 7, 8, 27, 28 and 40 in independent form as allowed in the Office Action dated August 8, 2001. Therefore, applicants respectfully request that the objection to claims 7, 8, 27, 28 and 40 be withdrawn and that they be allowed.

The Examiner has rejected claims 1-2, 6, 17-18, 23, 26 and 37-38 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 6,038,031 to Murphy ("Murphy"). In addition, the Examiner has rejected claims 3-5 and 25 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Murphy, and further in view of "Computer Graphics :Principles and Practice" by Foley et al. ("Foley"). Further, the Examiner has rejected claims 9-16, 19-20, 24, 29-36 and 39 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Murphy.

In particular, according to the Examiner, the passage in Murphy that states "At the edge of the cut-out, where valid and invalid source pixels are adjacent, the alpha values after filtering vary in proportion to the distance from the edge of the cut-out" (co. 6, lines 52-55) discloses the claim limitation of "wherein generation of the multi-level values do not depend on alpha blend values that existed prior to filtering." Applicants respectfully traverse this finding because of at least the following reasons.

In the present invention, for example, the following steps are taken to generate and use the alpha blend values: 1) filtering the

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graphical element with a low pass filter to generate a multi-level
value per pixel at an intended final display resolution; and 2) using
the multi-level values as alpha blend values for the graphical element
in a subsequent compositing stage. The generation of the multi-level
values do not depend on alpha blend values that existed prior to
filtering. Instead, they are generated through low pass filtering the
graphical element.

On the contrary, Murphy discloses filtering the pre-existing
alpha value. Thus, "the pixel being copied may be blended with the
destination framebuffer using the *filtered alpha value.*" (*emphasis
added*, col. 6, lines 50-52). The finding that Murphy discloses
filtering of the alpha values has further support in the following
passage from Murphy. "*The alpha channel of all pixels,* whether
rejected or accepted, *are filtered.*" (emphasis added, col. 6, lines
20-21).

Further, according to Murphy, "The alpha values of the edge
pixels are filtered so that they form a range from one within the area
to be drawn to zero within the area not drawn. In the region close
to the edge of what is to be drawn, the alpha values are filtered to
lie between zero and one." (col. 8, lines 53-57). The above passage
appears to further describe the following passage, "At the edge of the
cut-out, where valid and invalid source pixels are adjacent, the alpha
values after filtering vary in proportion to the distance from the
edge of the cut-out" (col. 6, lines 52-55), which has been cited by
the Examiner to show that Murphy discloses the claim limitation of
"wherein generation of the multi-level values do not depend on alpha
blend values that existed prior to filtering."

Applicants respectfully submit that there is a huge conceptual
difference between filtering existing alpha values to use as filtered
alpha values, and generating multi-level values to be used as alpha
blend values that do not depend on alpha blend values that existed
prior to filtering. In fact, Murphy appears to teach away from the

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present invention by disclosing that the alpha channel of all pixels are filtered to generate the filtered alpha values. (col. 6, lines 18-55).

Consider now the claims.

Claim 1 recites, in relevant portion, "filtering the graphical element with a low pass filter to generate a multi-level value per pixel at an intended final display resolution; and using the multi-level values as alpha blend values for the graphical element in a subsequent compositing stage, wherein generation of the multi-level values do not depend on alpha blend values that existed prior to filtering."

Claim 23 recites, in relevant portion, "a low pass filter for filtering the graphical element to generate multi-level values, one multi-level value per each pixel, at an intended final display resolution . . . wherein generation of the multi-level values do not depend on alpha blend values that existed prior to filtering."

Since Murphy does not disclose that generation of the multi-level values do not depend on alpha blend values that existed prior to filtering, applicants respectfully request that the rejection to claims 1 and 23 be withdrawn and that they be allowed.

Since claims 2-6, 9-20, 25-26 and 29-39 depend, directly or indirectly, from claims 1 and 23, respectively, they incorporate all the terms and limitations of their respective base claim in addition to other limitations, which together patentably distinguish these claims over the cited references. Therefore, applicants respectfully request that rejection to claims 2-6, 9-20, 25-26 and 29-39 be withdrawn and that they be allowed.

In view of the above remarks, applicants respectfully submit that claims 1-23 and 25-41 are in condition for allowance, and respectfully request a timely allowance of claims 1-6, 9-20, 23, 25-26 and 29-39 in addition to the already allowed claims 7-8, 21-22, 27-28 and 40-41. If there are any remaining issues that can be addressed by telephone,

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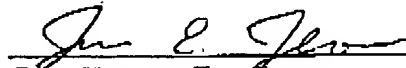
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applicants invite the Examiner to contact the applicants' attorney at the number indicated below.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

7.   (Amended) ~~The method of displaying a graphical element of claim 1~~ A method of displaying a graphical element comprising the steps of:

filtering the graphical element with a low pass filter to generate a multi-level value per pixel at an intended final display resolution; and

using the multi-level values as alpha blend values for the graphical element in a subsequent compositing stage,

wherein the graphical element includes text, and the display buffer is defined to have a constant foreground color that is consistent with a desired foreground color of the text.

8.   (Amended) ~~The method of displaying a graphical element of claim 1~~ A method of displaying a graphical element comprising the steps of:

filtering the graphical element with a low pass filter to generate a multi-level value per pixel at an intended final display resolution; and

using the multi-level values as alpha blend values for the graphical element in a subsequent compositing stage,

wherein the graphical element includes graphics, and the display buffer is defined to have a constant foreground color that is consistent with a desired foreground color of the graphics.

27.   (Amended) ~~The graphics display system of claim 23~~

A graphics display system for displaying a graphical element comprising:

a low pass filter for filtering the graphical element to generate multi-level values, one multi-level value per each pixel, at an intended final display resolution;

a display buffer for storing the multi-level values; and

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a display engine for compositing the multi-level values with graphics images using the multi-level values as alpha blend values,

wherein the graphical element includes text, and the display buffer is defined to have a constant foreground color that is consistent with a desired foreground color of the text.

28.   (Amended) ~~The graphics display system of claim 23~~

A graphics display system for displaying a graphical element comprising:

a low pass filter for filtering the graphical element to generate multi-level values, one multi-level value per each pixel, at an intended final display resolution;

a display buffer for storing the multi-level values; and

a display engine for compositing the multi-level values with graphics images using the multi-level values as alpha blend values,

wherein the graphical element includes graphics, and the display buffer is defined to have a constant foreground color that is consistent with a desired foreground color of the graphics.

40.   (Amended) ~~The graphics display system of claim 38~~

A graphics display system for displaying a graphical element comprising:

a low pass filter for filtering the graphical element to generate multi-level values, one multi-level value per each pixel, at an intended final display resolution;

a display buffer for storing the multi-level values; and

a display engine for compositing the multi-level values with graphics images using the multi-level values as alpha blend values,

wherein an outline of the graphical element, including all colors other than background color, is filtered using the low pass filter, wherein the graphical element has a plurality of foreground colors

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wherein the filtered outline is used as an alpha per pixel
value, and

wherein the filtered outline is used as a choice of an alpha
value per CLUT entry in a CLUT format.

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